BOSCH
Invented for life

D7024 Fire Alarm Control Panels

- **Four detector zones (expandable to eight); up to 20 two-wire smoke detectors per zone**
- **Built-in DACT**
- **Two notification appliance circuits (NACs) on board with an internal 24 VFWR, 4 A NAC power supply**
- **Easily converts to addressable with the addition of a D7039 Multiplex Expansion Module**
- **Programmable through front panel interface, remote D7033 Liquid-crystal Display (LCD) Keypads, or remote programming software (RPS)**

The D7024 Fire Alarm Control Panels (FACPs) can be used in commercial and public building applications such as schools, universities, manufacturing plants, and health care facilities. They are listed by UL for central station, local, auxiliary, and remote station systems.

The D7024 FACPs support four on-board initiating zones that can be expanded to eight using the D7034. Each initiating zone supports two-wire and four-wire detectors configurable as Class A, Style D (with D7014) or Class B, Style B loops. Each zone can support up to 20 two-wire detectors, or any number of four-wire detectors depending on available power. Each FACP has a built-in digital fire alarm communicator transmitter (DACT).

Enhance the D7024 conventional system features when running version 2.02 or higher firmware by adding a D7039 Multiplex Expansion Module. Adding a D7039 Multiplex Expansion Module to the D7024 turns the conventional FACP into an addressable FACP. The D7039 adds up to 247 addressable points to the base system and adds an additional 400 events to the history buffer for a total of 499 events. The D7039 also increases the number of programmable relay outputs from 18 to 58 and allows up to 100 system users (an addition of 84 PINs to the base system).

Functions

Notification Appliance Circuits (NACs)

Two on-board Class B, Style Y or Class A, Style Z (with D7015) NACs provide up to 4 A of 24 VFWR power to operate horns, strobes, bells, and other notification appliances. Each NAC can be programmed to provide Temporal Code 3, steady, pulsed, and synchronized output for Wheelock™ and Gentex™ notification appliances.

User Interface

A viewing port in the keyed control panel enclosure door shows the system status light-emitting diodes (LEDs) and LCD display while maintaining system keypad security. Unlocking the enclosure door provides access to the system controls for silencing off-normal conditions, zone bypassing, detector resetting, testing, other fire functions, and programming. These functions are also available on all D7033 LCD Keypads connected to the system. All D7036 LCD Annunciators provide custom text annunciation on a 32-character, backlit, two-line LCD display. All system keypads and annunciators have built-in sounders. Back-light intensity and sounder volume are programmable.

Personal Identification Numbers (PINs)

There are 16 PINs available for accessing system control. Assign each number an authority level to limit access to the system control functions.

Note The number of PINs increases to 100 with the addition of a D7039 Multiplex Expansion Module.

History Buffer

The system stores events in a 99-event history buffer.

Note The number of events that can be stored in the history buffer increases to 499 with the addition of a D7039 Multiplex Expansion Module.

Central Station Reporting

The D7024 FACPs send reports to two telephone numbers with full single, double, and backup reporting. They communicate in BFSK, SIA, Contact ID, Modem IIIa^2, and 4/2 and 3/1 Tone Bursts.

Dirty Smoke Detector Monitoring

All on-board zones and D7034 zones are continuously monitored for smoke detectors signaling a dirty condition using the Bosch Chamber Check® feature and CleanMe® protocol. If a detector's smoke chamber is dirty, the detector sends a CleanMe signal on the two-wire loop or a dirty detector signal on the addressable loop. The control panel annunciates that there is a dirty detector on the loop or the address. The Chamber Check feature signals a dirty smoke chamber using the LED on the detector head.

Accessories

The D7024 enclosure has space for additional accessory modules and two D1218 (18 Ah) batteries or two D126 (7 Ah) batteries.

Certifications and Approvals

Region	Certification	
USA	FM	
	CSFM	7165-1615: 147 July 2008
	NYC-MEA	12-92-E, Vol. VII
		12-92-E, Vol. 14
Canada	IC	1249 7703 A
Hong Kong	HKFSD	

Installation/Configuration Notes

Compatible Products

The following products are compatible with the D7024 FACPs:

Category	Product ID	Product Description
Batteries and Power Supplies	D126	12 V, 7 Ah battery
	D1218	12 V, 18 Ah battery
	D7038	Remote NAC power supply
Detectors	For two-wire detectors, refer to *D7022-D7024 Compatibility List Technogram* (P/N: 34445)	
Keypads and Annunciators	D7030X	Eight-point LED annunciator (eight red)
	D7030X-S2	Eight-point LED annunciator (two yellow, six red)
	D7030X-S8	Eight-point LED annunciator (eight yellow)
	D7032	Eight-zone LED annunciator expander (eight red)
	D7033	LCD fire system keypad
	D7036	LCD annunciator
Modules	D132B	Smoke detector reversing relay module
	D184A	Auxiliary local energy interface kit
	D185	Reversing polarity module
	D275	EOL power supervision module
	D7014	Zone converter module
	D7015	Class B to Class A NAC converter
	D7031	Silence reset module
	D7034	Four-point expander
	D7035	Octal relay module
	D7035B	Octal relay module in box
	D7039	Multiplex expansion module
	D7039R	Multiplex expansion module retrofit kit
NAC Devices	Refer to *D7024 NAC Compatibility List Technogram* (P/N: 34950)	

The following additional products are compatible with the D7024 Addressable FACPs:

Category	Product ID	Product Description
Detectors and Detector Bases	D7050	Addressable photoelectric smoke detector
	D7050TH	Addressable photoelectric smoke and heat detector
	D7050-B6	Addressable detector base
Modules	D7042	Multiplex eight-input remote module
	D7042B	Multiplex eight-input remote module in box
	D7044	Multiplex single-input module
	D7044M	Mini multiplex single-input module
	D7048	Multiplex octal driver
	D7048B	Multiplex octal driver in box
	D7052	Multiplex dual-input module
	D7053	Multiplex input-output module
Pull Stations	FMM-7045	Single-action manual station
	FMM-7045-D	Double-action manual station

Parts Included

Quant.	Component
1	D7024 board in a static-resistant bag
1	Enclosure (P/N: 30897)
1	Lock set with 2 keys (P/N: 24065)
1	Transformer (P/N: 29413)
6	2.21 kΩ end-of-line (EOL) resistors (P/N: 25899 or 4998113202)
1	Hardware pack
1	Literature pack

Note For the D7024 to be addressable, a D7039 Multiplex Expansion Module must be installed. The D7039 is purchased separately.

Technical Specifications

Environmental Considerations

Relative Humidity:	Up to 93%, non-condensing
Temperature (operating):	+32°F to +120°F (0°C to +49°C)

Mechanical Properties

Color:	Red
Dimensions (H x W x D):	20.8 in. x 15 in. x 4.3 in. (52.8 cm x 38.1 cm x 10.9 cm)
Material:	Cold-rolled steel Base: 18 gauge (1.2 mm) Cover: 19 gauge (1.1 mm)

Outputs

NAC:	24 VFWR nominal, 4 A maximum
On-board Relays:	Two Form C contacts rated at 5 A, 28 VDC
Off-board Relays:	Up to two D7035 Octal Relay Modules each providing eight Form C relay outputs; contacts rated at 5 A, 28 VDC In an addressable system, up to 20 D7053 Multiplex Input-Output Modules per bus for a total of 40

Power Requirements

Current (alarm):	380 mA
Current (standby):	200 mA
Power (primary)	120 VAC, 1.5 A maximum, 60 Hz

Sensor Circuits

Current:	44 mA maximum per loop
Line resistance:	150 Ω
Voltage:	24 VDC nominal

Trademarks

Trademark names are used throughout this document. In most cases, these designations are claimed as trademarks or registered trademarks in one or more countries by their respective owners. Rather than placing a trademark symbol in every occurrence of a trademark name, Bosch Security Systems, Inc. uses the names only in an editorial fashion and to the benefit of the trademark owner with no intention of infringing the trademark.

Chamber Check is a registered trademark of Bosch Security Systems, Inc. in the United States.

CleanMe is a registered trademark of GE Interlogix in the United States and/or other countries.

Wheelock is a trademark of Wheelock, Inc.

Gentex is a trademark of Gentex Corporation.

Ordering Information

D7024 FACP Kit contains FACP, enclosure, transformer, and six EOL resistors.	**D7024**
D7024LC FACP without Enclosure and Transformer Kit contains FACP only (no enclosure or transformer)	**D7024LC**
Accessories	
KEY-625 Replacement Key Replacement key	**KEY-625**

Americas:
Bosch Security Systems, Inc.
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180
security.sales@us.bosch.com
www.boschsecurity.us

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: + 31 40 2577 284
Fax: +31 40 2577 330
emea.securitysystems@bosch.com
www.boschsecurity.com

Asia-Pacific:
Robert Bosch (SEA) Pte Ltd, Security Systems
11 Bishan Street 21
Singapore 573943
Phone: +65 6258 5511
Fax: +65 6571 2698
apr.securitysystems@bosch.com
www.boschsecurity.com

Represented by

© Bosch Security Systems Inc. 2010 | Data subject to change without notice
T3642966027 | Cur: en-US, V8, 4 Jul 2010